

Case 3346***Misumena nepenthicola* (currently *Henriksenia nepenthicola*; Arachnida, Araneae, THOMISIDAE): proposed attribution of authorship to Pocock (1898)**

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Abstract. The purpose of this application, under Articles 12 and 50.1 of the Code, is to validate the commonly used, but incorrect, attribution of the synonym *Misumena nepenthicola* (currently *Henriksenia nepenthicola*) to Pocock (1898). This name of a nepenthicolous thomisid spider from Borneo was unavailable from the original paper by Pocock (1898). It is threatened by the available but not widely used name *Misumenops nepenthicola* Bristowe, 1930 and by its primary homonym *Misumenops nepenthicola* Fage, 1928, used for a different spider species from Singapore. It is proposed that the attribution of the name to Pocock (1898) is validated.

Keywords. Nomenclature; taxonomy; Arachnida; Araneae; MISUMENINI; *Misumena*; *Misumenops*; *Henriksenia*; *Henriksenia nepenthicola*; Borneo; Singapore; crab spiders; *Nepenthes* pitchers.

1. Pocock (1898, p. 274) introduced the name *Misumena nepenthicola* for a thomisid spider living in pitchers of some *Nepenthes* species from Borneo (currently Sabah, Malaysia). He indicated its locality (Labuan Island off the northwest coast of Borneo) and microhabitat (pitchers of some species of *Nepenthes*), but did not provide any description, rendering this name unavailable (Article 12).

2. Fage (1928, p. 13) 'described' a nepenthicolous spider from Singapore and identified it as *Misumenops nepenthicola* in the belief that it was conspecific with *Misumena nepenthicola* Pocock, 1898. I have studied the syntypes of *Misumenops nepenthicola* Fage (1928) at the Muséum National d'Histoire Naturelle, Paris, along with recently collected material of the nepenthicolous MISUMENINI species from Singapore and compared those with the syntypes of *Misumena nepenthicola* Pocock, 1898 from Borneo (Labuan). This comparison revealed that these are two different species. Besides, the comparison of nepenthicolous species of the tribe MISUMENINI from various areas has shown that there are at least five species commonly identified as '*Misumenops nepenthicola*' (Lehtinen, in preparation).

3. Bristowe (1930, pp. 345–346) described *Misumenops nepenthicola* based on material from Borneo, at least partly based on the syntypes of *Misumena nepenthicola* Pocock, 1898 from Labuan attributing the species to Pocock. He noted that Pocock (1898) did not provide any description for *Misumena nepenthicola* and published a description and drawings of the female habitus and sketches of the female and male copulatory organs of this species.

4. One male, one female and a badly broken subadult female of a nepenthicolous thomisid spider from Labuan collected by A.H. Everett are housed in the Natural History Museum, London, and are preserved in a vial labelled 'TYPE' and numbered BM 1894.6.27.2.5. These three syntypes of *Misumena nepenthicola* Pocock, 1898 are also syntypes of *Misumenops nepenthicola* Bristowe, 1930, as they agree with Bristowe's (1930) drawings. The locality Labuan was not mentioned in the description by Bristowe (1930), but the island of Labuan was administratively part of Borneo in Bristowe's time and now of the Malaysian state Sabah. The only male in this vial is herein designated as the lectotype of *Misumena nepenthicola* Pocock, 1898 and Bristowe, 1930.

5. *Misumenops nepenthicola* Fage, 1928 (p. 13) is a valid name for a nepenthicolous spider from Singapore currently assigned to the genus *Henriksenia* Lehtinen, 2004, while the name *Misumenops nepenthicola* Bristowe, 1930 is its junior homonym. The nomenclatural problems of this species remained unnoticed by most taxonomists who persistently used the name *Misumenops nepenthicola* Pocock, 1898 for several species of MISUMENINI from Southeast Asia. The name appears in all major lists, textbooks and catalogues (e.g. Berland, 1932; Baum, 1938; Roewer, 1954; Bonnet, 1957; Platnick, 2006). The binomen *Misumenops nepenthicola* has been much used in ecological and in some other non-taxonomic publications, sometimes attributed to Pocock but most commonly without any author's name, possibly in the belief that there was only one species of nepenthicolous Misumenini spider. Fage (1926), Mohr (1931, 1932), Bristowe (1931), Studnička (1984), Moran (1993), Boulay (1997), Hartmeyer (1998), Soeseno (1998), Koh (2000) and Stanford (2003) used this name in a study of complex ecosystems inside *Nepenthes* pitchers. This name has also been used in papers on theoretical biology (e.g. Luczkovich et al., 2003). The application of the provisions of the Code would seriously disturb stability and cause confusion in the taxonomy of thomisid spiders. Stability would be best served by the validation of the attribution of *Misumena nepenthicola* to Pocock (1898). In that case the name *Misumenops nepenthicola* Fage, 1928 will become a junior homonym of *Misumena nepenthicola* Pocock, 1898, and *Misumenops nepenthicola* Bristowe, 1930 will become a junior synonym of *Misumena nepenthicola* Pocock, 1898.

6. It is proposed that the name *Misumena nepenthicola* (currently *Henriksenia nepenthicola*) is attributed to Pocock (1898).

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the name *nepenthicola*, as published in the binomen *Misumena nepenthicola*, is deemed to be available from Pocock, 1898;
- (2) to place on the Official List of Specific Names in Zoology the name *nepenthicola* Pocock, 1898, as published in the binomen *Misumena nepenthicola*, as defined by the lectotype housed in the Entomology Department of the Natural History Museum, London, and as ruled to be available in (1) above.

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Ms Janet Beccaloni, Natural History Museum, London, kindly made the type material of *Misumenops nepenthicola* Bristowe, 1930 from Labuan Island and material of a related, undescribed species from Thailand available for study. The late

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References

- Baum, J.** 1938. *V říši pavouků*. 175 pp. Vesmír, Praha.
- Berland, L.** 1932. Les Arachnides (Scorpions, Araignées, etc.): biologie systématique. *Encyclopédie entomologique, Série A., Travaux généraux*, 16: 1–485.
- Bonnet, P.** 1957. *Bibliographia araneorum*, Toulouse, 2(3): 1927–3026.
- Boulay, J.** 1997. Les Nepenthes. *Dionée*, 38, <http://www.multimania.com/dionaea/bulletins/>, accessed in April 2006.
- Bristowe, W.S.** 1930. Notes on the Biology of Spiders II. Aquatic spiders. *Annals and Magazine of Natural History*, (10)6(33): 343–347.
- Bristowe, W.S.** 1931. Notes on the Biology of spiders: IV. Further notes on aquatic spiders with a description of a new species of *Pseudoscorpion* from Singapore. *Annals and Magazine of Natural History*, (10)8(47): 457–465.
- Fage, L.** 1926. Sur une Araignée vivant dans les urnes de *Nepenthes*. *Compte Rendu Sommaire des Séances de la Société de Biogéographie*, 3(24): 82–85.
- Fage, L.** 1928. Araneae. In Notes on the Fauna of Pitcher Plants. Part IV. *Journal of the Malayan Branch of the Royal Asiatic Society*, 6(3): 13–19.
- Hartmeyer, S.** 1998. Some new facts on the phenomenon of carnivorous plant. <http://www.t-online.de/S.Hartmeyer/artsyme2.htm>, accessed in April 2006.
- Koh, J.K.H.** 2000. *A guide to common Singapore spiders*. 160 pp. Singapore Science Centre, Singapore.
- Lehtinen, P.T.** 2004. Taxonomic notes on the Misumenini (Araneae: Thomisidae: Thomisinae), primarily from the Palaearctic and Oriental Misumenini (Thomisidae: Thomisinae). Pp. 147–184 in Logunov, D.V. & Penney, D. (Eds.), *European Arachnology 2003 (Arthropoda Selecta Special Issue 1 – Proceedings of the 21st European Colloquium of Arachnology, St. Petersburg, 4–9 August 2003)*, Zoological Museum of the Moscow Lomonosov State University, Moscow.
- Lehtinen, P.T.** [In preparation]. Revision of the nepenthicolous Misumenini (Araneae: Thomisidae) from Southeast Asia.
- Luczkovich, J.L., Borgatti, S.P., Johnson, J.C. & Everett, M.** 2003. Defining and Measuring Trophic Role Similarity in Food Webs Using Regular Equivalence. *Journal of Theoretical Biology*, 220: 303–321.
- Mohr, J. C. van der Mer.** 1931. Enkele aanvullende Gegevens betreffende *Nepenthes*-Spinnen. *Tropische Natuur: Nederlandsch-Indische Natuurhistorische Vereeniging Weltevreden*, 20: 24–29.
- Mohr, J. C. van der Mer.** 1932. A propos des Araignées népenthicoles du nord de Sumatra. *Tijdschrift voor Entomologie*, 75, Suppl.: 233–241.
- Moran, J.A.** 1993. *Misumenops nepenthicola*: the top aquatic predator of the *Nepenthes* food web. *Brunei Museum Journal*, 8: 83–84.
- Platnick, N.I.** 2006. *The World Spider Catalog, version 6.5*. American Museum of Natural History, online, <http://research.amnh.org/entomology/spiders/catalog/INTRO1.html>, accessed in April 2006.

- Pocock, R.I.** 1898. Spider and pitcher plant. *Nature*, **58**: 274–275.
- Reimoser, E.** 1931. Echte Spinnen der deutschen limnologischen Sunda-Expedition. *Archiv für Hydrobiologie, Suppl.*, **8**: 759–770.
- Roewer, C.F.** 1954. *Katalog der Araneen von 1758 bis 1940, bzw. 1954*, vol. 2. 1751 pp. Bruxelles.
- Soeseno, S.** 1998. Periuk hantu menjebak lalat. *Intisari Online*. www.indomedia.com/intisari/1998/mei/periuk.htm, accessed in April 2006.
- Stanford, A.** 2003. W. pajęczej sieci, *Polskie Towarzystwo Kreationistycznego*, <http://creationism.org.pl/artykuly/AStanford>, accessed in April 2006
- Studnička, M.** 1984. Masožravé rostliny. Tráveni kořisti, <http://www.masozravky.com/ostatni/kniha/STUDNICKA/studnicka05.htm>, accessed in April 2006.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).